DOCUMENT RESUME

ED 247 221 SP 024 910

AUTHOR Pooler, Anne E.
TITLE Teacher Education for a Technocratic Society.
PUB DATE 28 Apr 83
NOTE 21p.; Paper presented at the Annual Conference of the New England Educational Research Organization, Inc. (Rockville, ME, April 27-29, 1983).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Standards; Field Experience Programs; Futures (of Society); Higher Education; Liberal Arts; Needs Assessment; Preservice Teacher Education; *Program Improvement; *Schools of Education; *Teacher Education Programs; Teacher Effectiveness
IDENTIFIERS University of Maine Orono

ABSTRACT

In an effort to redesign an undergraduate teacher preparation program at the University of Maine (Orono), field research was conducted gathering attitudes and opinions from educators, students, and special interest groups (e.g., State Board of Education, State Teacher's Association). Data were gathered from questionnaires, group sessions, and invited testimony. Participants gave their opinions on what elements should be contained in an effective teacher education program. Students gave their opinions on what were the most and least helpful courses in their program. Responses indicated that practitioners and students agreed that a redesign of the program was necessary. With this preliminary information, a team composed of practitioners identified 12 principles of effective teaching and 13 principles of effective teacher preparation. Based upon these principles, a model was constructed proposing specific innovations, including liberal arts, professional preparation teams, human development, instructional skills and professional seminars, field experiences, and evaluative processes. Appended to this report is a list of the identified principles for effective teachers and teacher preparation, a statement on the mission of the college of education, and an example of a typical four-year program. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Anne E. Pooler

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED247221

TEACHER EDUCATION FOR A TECHNOCRATIC SOCIFTY

Paper presented at the New England Educational Research Organization, Inc. Annual Conference

Anne E. Pooler
College of Education
University of Maine at Orono

April 28, 1983

SP024910

ABSTRACT

TEACHER EDUCATION FOR
A TECHNOCRATIC SOCIETY

Teacher education in the next 10 years will provide the base for professional services to be delivered primarily from 1990 to 2020. The services delivered to children in that period will have an effect that carries forward at least to the mid twenty-first century.

Today, a society, often referred to as a technetronic society, is developing in which a predominant economic activity of the people is in producing, sharing, and regulating the use of information. Information-age citizens require specialized skills.

For the past two years, the College of Education has harvested information from educators, students, and special interest groups, (e.g. State Board of Education, State Teacher's Association, Legislators etc.) in an effort to redesign a contemporary undergraduate teacher preparation program. Field research which deals with attitudes about the needs of students and teachers will first be presented.

Secondly, a sample of principles of effective teaching and of effective teacher preparation will be discussed as developed by a Planning Leadership Team of 16.

The third and last segment will suggest a model for a teacher preparation program which would contain the following major components: a) liberal arts, b) professional preparation team, c) human development segment, d) instructional skills and professional seminars, e) field experiences and an education semester, and f) an evaluative process with structured checkpoints.

TEACHER EDUCATION FOR
A TECHNOCRATIC SOCIETY

Teacher education in the next 10 years will provide the base for professional services to be delivered primarily from 1990 to 2020. The services delivered to children in that period will have an effect that carries forward at least to the mid twenty-first century.

Today a society, often referred to as a technetronic society, is developing in which a predominant economic activity of the people is in producing, sharing, and regulating the use of information. Information-age citizens require specialized skills. Schools must be prepared to teach social, technical and academic skills, and our teacher preparation programs must train personnel to work in the twenty-first century.

For the past two years, the College of Education has harvested information from educators, students, and special interest groups, (e.g. State Board of Education, State Teacher's Association, Legislators etc.) in an effort to redesign a contemporary undergraduate teacher preparation program. Field research which deals with attitudes about the needs of students and teachers will first be presented.

Secondly, a sample of principles of effective teaching and of effective teacher preparation will be discussed as developed by a Planning Leadership Team of 16. They will range from the non-controversial (effective teaching promotes student learning) to the more debatable (effective teaching inspires appreciation for the life of the mind, the worth of the individual, the importance of beauty, and the value of well-being).

The third and last segment will suggest a model for a teacher preparation program which would contain the following major components: a) liberal arts, b) professional preparation team, c) human development segment, d) instructional skills and professional seminars, e) field experiences and an education semester, and f) an evaluative process with structured checkpoints.

I. Attitudes about the Needs of Students and Teachers

Data was gathered from questionnaires, group sessions, and invited testimony.

STUDY A

A summary of 717 replies from school personnel who completed a questionnaire (see Appendix A) is presented in Table 1. The same questionnaire was distributed to undergraduates who were currently enrolled in the College of Education. The results from 406 respondents are also included in Table 1.

Ninety-one percent of the practitioners and sixty-four percent of the students agreed to some extent that teacher training procedures need to be redesigned for the 1980's and 1990's. Twenty-seven percent of the students had no opinion.

Eighty-six percent of the practitioners felt that teachers need to acquire new skills and techniques to be effective in the 80's and 90's. Eighty-one percent of the students concurred with this statement.

Seventy-eight percent of the practitioners and students responded that teacher preparation programs need to prepare a person as a specialist in the learning and teaching process.

Table I

RESULTS OF PRACTITIONERS AND STUDENT SURVEYS

		Strongly Agree		Agree		No Opinion		Disagree		Strongly Disagree	
		N	%	N	%	N	%	N	%	N	%
1. Teacher training procedures need to be redesigned for the 1980's and 90's.	*	330	46	323	45	44	6	10	1	5	1
	+	78	19	193	45	108	27	30	7	4	1
2. Teachers need to acquire new skills and techniques to be effective in the 80's and 90's.	*	237	33	379	53	56	8	32	5	6	1
	+	91	22	239	59	48	12	25	6	3	1
3. Teacher preparation programs need to prepare a person as a specialist in the learning & teaching process.	*	216	31	335	47	79	11	59	8	17	2
	+	98	24	215	54	59	15	28	7	2	1
4. Teacher preparation programs need to prepare a person with a strong liberal arts background.	*	124	18	278	39	166	24	122	17	14	2
	+	35	4	125	32	157	40	70	18	7	2
5. Teacher preparation programs provide enough field-based experiences.	*	30	4	67	9	51	7	341	48	223	31
	+	21	5	105	26	66	17	165	42	41	10
6. Teachers in the field have a responsibility to provide input into the undergraduate preparation.	*	192	27	411	58	72	10	21	3	14	2
	+	98	25	214	54	71	18	15	4	1	1

*Practictioners survey N = 717

+Undergraduate survey N - 406

Fifty-seven percent of the practitioners agreed that teacher preparation programs need to prepare a person with a strong liberal arts background as compared to only thirty-six percent of the students. Forty percent of the students had no opinion in this area.

Seventy-nine percent of the practicing respondents disagreed that enough field based experiences are provided to students whereas fifty-two percent of the students also disagreed.

That teachers in the field have a responsibility to provide input into undergraduate preparation was supported by eighty-five percent of the practitioners and seventy-nine percent of the students.

Most Helpful and Least Helpful Courses

Open-ended questions were asked about courses that have been the most helpful and least helpful. The responses were clustered into areas for the educators whereas the students could identify specific course titles. Under the rubric of curriculum, methods courses were listed one hundred and seventy times, education courses ninety times and theory courses fifty six times by practioners as being least helpful. Four hundred and twenty-five identified student teaching as most helpful. Practicum and field experiences were listed one hundred and ten times as well as methods courses - seventy-five times.

Fifty four percent of the students felt that a freshmen early experience program was the most helpful and twenty-six percent indicated that a course in the foundations area, a history of the American School was the least useful.

In summary, there is support for a redesigned program and agreement that educators in the field should provide input into undergraduate

programs. The most significant difference between the practitioners and students revolved around the question of liberal arts preparation. With many constituent groups calling for more liberal arts, it was interesting to note that a quarter of the people in the field and forty percent of the students had no opinion on this question.

STUDY B

A second attempt to gather data involved group meetings with personnel from twenty-one school systems where brainstorming sessions occurred and only two questions were addressed. a) what are student needs for the 80's and 90's and b) what are teacher preparation needs for the 80's and 90's. Documentors recorded the information and sorted the responses into themes. The most consistent concerns were the following:

- Stronger basic liberal arts background
- Child development
- Knowledge of behavior/discipline problems and approaches to solving these problems
- Special education - mainstreaming
- Classroom management practice/theory
- Early and continuous field based experience
- More teaching time for student teachers
- Expose student teachers to several master teachers and different levels of experience
- Basic skills in subject areas
- Help prospective teachers to have realistic expectations of their work and develop professional attitudes

- Develop better screening processes for selection of students into teacher preparation programs
- Higher standards of excellence in coursework selection criteria other than SAT CEEB scores

Again the theme of more, earlier and continuous field experience received the greatest support.

II. Principles of Effective Teaching and Teacher Preparation

With this preliminary information in hand from constituent groups, a Planning Leadership Team composed of faculty, teachers, administration and a representative of the State Department of Education identified twelve Principles of Effective Teaching and thirteen Principles of Effective Teacher Preparation (appendix B). This occurred during eleven full day sessions.

Many words were spilled, principles lobbied for and compromises struck which resulted in the final product. What was not captured in ink was the growth that each member experienced.

A sample of the principles demonstrates the range of concern.

Effective teaching:

a.) promotes student learning

b.) is a continuous process of assessing needs, planning instruction and evaluating results

c.) requires continual learning by the teacher in order to present a balanced understanding of current and historical issues of consequences to the public good

d.) inspires appreciation for the life of the mind, the worth of the individual, the importance of beauty, and the value of physical well-being, e.g. love of literature, respect for ethnic differences, enjoyment of music, and satisfaction in bodily grace.

Principles a and b are predictable. The next two reflect a deep concern that educators be lifelong scholars and individuals who have an appreciation of the role aesthestics play in society, that they thrive in an intellectual environment. This is an extension of the concern so many people had for educators possessing a background in liberal arts. Coursework alone does not guarantee a liberally educated person. We must provide undergraduate students with opportunities to experience "the importance of beauty, the life of the mind" etc.

This position was also forged in concert with a desire that students be prepared to make judgments in light of complex choices created by an expanding technocratic society (e.g. medical decisions, who needs to be "educated" etc.)

We must not leave the impression that a good teacher need only to know his/her content area in depth. This narrow focus may haunt both the elementary and secondary schools. An opposite danger is the potential teacher who has finely tuned social skills and is only concerned about the student as an individual. If recent technology fashions the economic and social revolution that current thinkers are predicting, a blend of refined academic and social talents are needed for teachers in the twenty-first century.

III. A Model for a Teacher Preparation Program

Based on the principles discussed previously, a model was constructed which proposed the following innovations:

LIBERAL ARTS

- A major portion of a student's program would be in the Liberal Arts. A major interdisciplinary Liberal Arts seminar would occur in the last year of the program. In addition,

each graduate would be required to complete a Senior Paper/Project designed to be a creative expression of the student's background in the liberal arts.

PROFESSIONAL PREPARATION TEAM

- Professional Preparation Teams would be formed to include at least one University teacher educator, 2-3 cooperating teachers from a school district, about 25 students divided among Freshmen, Sophomores, Juniors, and Seniors, and one or more graduate students. The team would work in partnership with a school district.

HUMAN DEVELOPMENT

- Exposure to human development concepts would be thorough and would occur primarily in seminar and field-based settings, interwoven with the work of the Professional Preparation Team.

INSTRUCTIONAL SKILLS AND PROFESSIONAL SEMINAR

- The teaching of instructional skills would occur within the framework of the Preparation Team and be integrated into the student's content area as the student moves through various stages to the completion of student teaching. A major seminar would occur in the final year dealing with the "nuts and bolts" of working in a school: professional organizations, contracts, record-keeping, school/community politics, relationships to school board, etc.

FIELD EXPERIENCES AND EDUCATION SEMESTER

- Field experiences would occur within the framework of the Professional Preparation Team, beginning early in the student's program and escalating to a 10-12 week program of student teaching in the fourth year. An Education Semester would be scheduled prior to Student Teaching during which the student would attend local schools for approximately six weeks to be a participatory observer and instructional aide. The remainder of the semester would be spent on campus in an intensive program of study and practice in teaching methods, curriculum and specialized content skills development.

EVALUATIVE PROCESSES

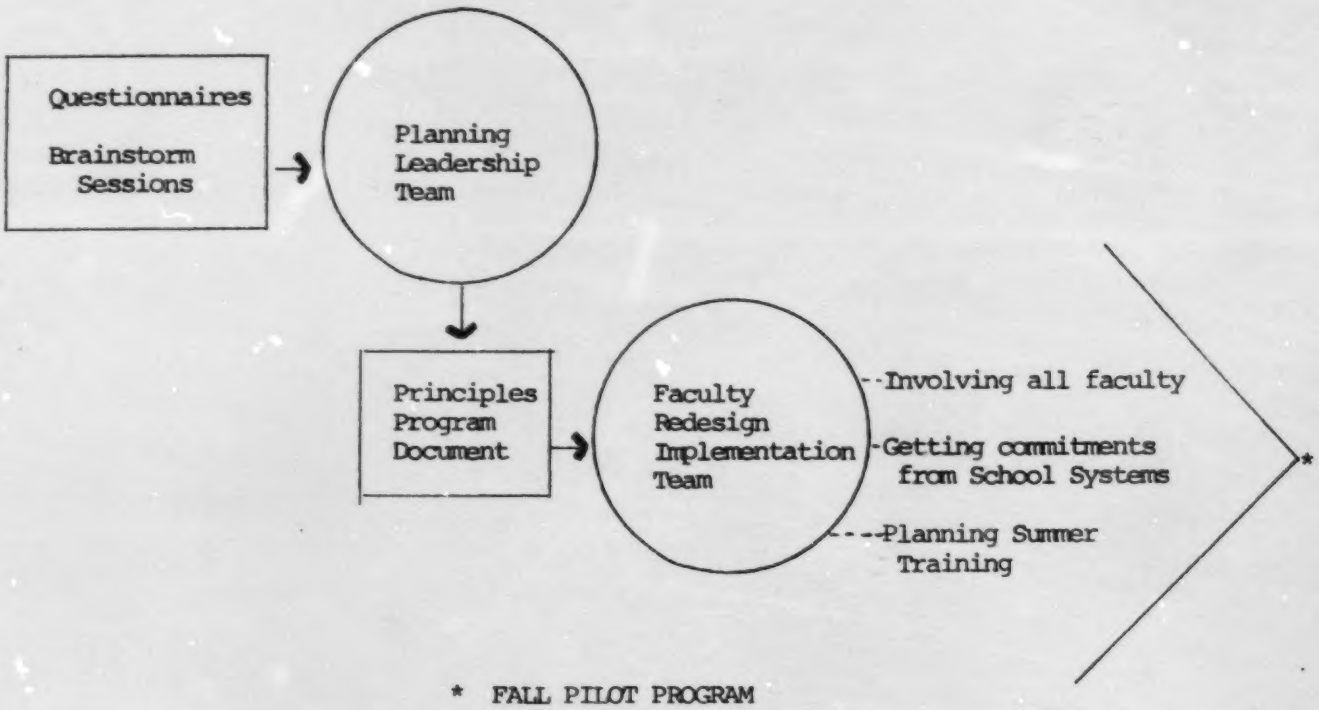
- The students will undergo three significant evaluative processes in the form of panel interviews: 1) for admission to the teacher preparation program at the conclusion of the second year; 2) for admission to student teaching at the conclusion of the third year;

and 3) at the conclusion of their formal program. In preparation for these interviews, the student would develop a portfolio, beginning in the Freshman year, which would chronicle their experiences, work and evaluations.

Appendix C contains an example of a four year program for students. At the end of this stage it was necessary to have the education faculty assume complete control of future plans. A Redesign Implementation Team is sifting the workable from the "dreamable." It is currently planning on piloting portions of the new program in the fall.

SUMMARY

From the field research conducted at the start, an orderly plan was followed to use the information gathered and redesign our undergraduate program.



* FALL PILOT PROGRAM

Practitioners and students overwhelmingly agreed this redesign was necessary. Their concern for stronger basic liberal arts and early and continuous field experience permeated every stage. Major challenges remain in moving school personnel from thinking they should be involved in preparation to actively assisting and in motivating resident faculty from "business as usual" to directing their energies toward this new focus.

Risks are involved but it is time!

Appendix A

University of Maine at Orono

College of Education

SURVEY FORM

Position in school system _____ If you teach, grade/s taught _____

Subject/subject areas taught _____ Years of teaching experience _____

Are you currently enrolled in a degree program? _____

	Bachelor's Degree	Masters Degree	C.A.S.	Doctorate
UMO	_____	_____	_____	_____
Other college in Maine	_____	_____	_____	_____
Other type of college/university out of state	_____	_____	_____	_____

KEY: Strongly Agree 1 | Agree 2 | No Opinion 3 | Disagree 4 | Strongly Disagree 5

1. Teacher training procedures need to be redesigned for the 1980's and 90's. 1 2 3 4 4

2. Teachers need to acquire new skills and techniques to be effective in the 1980's and 90's. 1 2 3 4 5

3. Teacher preparation programs need to prepare a person as a specialist in the learning and teaching process. 1 2 3 4 5

4. Teacher preparation programs need to prepare a person with a strong liberal arts background. 1 2 3 4 5

5. Teacher preparation programs provide enough field based experiences. 1 2 3 4 5

6. Teachers in the field have a responsibility to provide input into the undergraduate preparation of teachers. 1 2 3 4 5

7. List the preservice education experiences that have been most helpful in your teaching. _____

_____

_____

8. List the preservice education experiences that have been least helpful in your teaching. _____

_____

_____

9. Ways that teachers in the field might assist in the undergraduate preparation of teachers are: _____

Appendix B

PRINCIPLES OF EFFECTIVE TEACHER PREPARATION

1. The effective teacher preparation experience insures that prospective teachers are well-versed in the content of instruction.

2. The effective teacher preparation experience is rigorous, founded on established and emerging research, theory and philosophy, and provides periodic checkpoints, where the overall effectiveness of the prospective teacher is evaluated.

3. The effective teacher preparation experience provides many planned and supervised field-based experiences, in a variety of settings (e.g., day care centers, schools, senior citizens centers) with frequent analysis of the prospective teacher's performance.

4. The effective teacher preparation experience engages the prospective teachers in analysis of their own and others' learning and gives them skills to enhance learning.

5. The effective teacher preparation experience gives the prospective teacher broad knowledge of many academic areas and requires them to bring their liberal education constantly to bear on their teaching.

6. The effective teacher preparation experience provides the prospective teacher with the opportunity to study, experience and practice a variety of teaching styles with pupils of different age levels and abilities.

7. The effective teacher preparation experience gives the prospective teacher a working knowledge of developmental and group psychology in order to integrate their use into the planning and management of learning.

8. The effective teacher preparation experience engages the prospective teacher in study and argument about issues of current and historical significance to humankind and inspires the development of just and altruistic ideals.

9. The effective teacher preparation experience prepares teachers to respond appropriately to a wide variety of elementary and secondary school situations (e.g., mainstreaming, individualization, differences in class size, age differences, parent conferences).

Appendix B

PRINCIPLES OF EFFECTIVE TEACHING

1. Effective teaching promotes student learning.

2. Effective teaching demands of the teacher a dedication to learning and continued development as a whole person.

3. Effective teaching balances the rights of individuals and community well-being.

4. Effective teaching requires an understanding of how learning occurs and the interpretation of student needs to assure continuous progress in learning.

5. Effective teaching uses knowledge derived from many many areas and clearly relates it to students.

6. Effective teaching requires continual learning by the teacher in order to present a balanced understanding of current and historical issues of consequences to the public good.

7. Effective teaching utilizes the knowledge of individual and group psychology to improve learning experiences and student behavior.

8. Effective teaching occurs when the teacher's enthusiasm for the subject matter generates a love of learning within the student.

9. Effective teaching is a continuous process of assessing needs, planning instruction and evaluating results.

10. Effective teaching takes into account the impact of the physical environment on the learner.

11. Effective teaching inspires appreciation for the life of the mind, the worth of the individual, the importance of beauty, and the value of physical well-being, e.g. love of literature, respect for ethnic differences, enjoyment of music, and satisfaction in bodily grace.

12. Effective teaching requires a support system that includes colleagues, administrators, parents and community members.

Appendix B

THE COLLEGE OF EDUCATION'S MISSION IN TEACHER PREPARATION

Given these principles of effective teaching and effective teacher preparation, the Planning Leadership Team recommends that the College of Education's mission in teacher preparation should contain these elements.

1. The teacher education program should be recruiting the most able students with demonstrated ability in academic performance and communication skills.

2. Admission and retention procedures should reflect as much attention to a student's commitment, motivation, positive attitude toward self and others, and basic orientation to life, as to academic and professional performance.

3. The teacher education program should prepare the prospective teachers in their content areas.

4. The teacher education program should allow flexibility for individualized programs based on the personal experiences and abilities of the prospective teacher.

5. Retention and graduation decisions in teacher education should be based on the student's acquisition and demonstration of the attributes of effective teaching.

6. Realistic on-site experiences, developed in a partnership between the university and the public schools with stress on appropriate evaluation and supervision, are a critical component in the professional preparation of teachers.

7. An effective teacher education program should provide prospective teachers with supervised field experiences in a variety of settings in order to prepare them to select their level of specialization.

8. An effective teacher education program should provide understanding of the political, economic and social roles which are found in the schools and in the society in which the schools exist.

9. The agreed characteristics of a good teacher should serve as the basis for designing the teacher education curriculum to provide prospective teachers with their personal and professional growth experience.

10. The effective teacher preparation experience provides training in the use of technology that could affect the teaching/learning process.

11. The effective teacher preparation experience teaches prospective teachers the main theories of human development: cognitive, ethical, moral, emotional and motor.

12. The effective teacher preparation experience prepares the prospective teacher in the skills of communication with students, peers, parents and the community.

13. The effective teacher preparation experience provides teachers with a clear understanding of the roles of principals, superintendents, and the school committee in the formulation of school policies and the administration of schools.

Appendix C

Example of a Typical Student Program

YEAR 1

Professional Preparation Team Activities

- Self-awareness
- Career Awareness
- Counseling
- Advisement
- Observation Skills
- Group Communication Skills
- Initial Field Experiences

	HOURS
Prof. Prep. Team	6
Human Development	6
Lib. Arts & Major	21
TOTAL	33

YEAR 2

Professional Preparation Team Activities

a) Generic Instruction Skills
- Planning
- Diagnosing
- Instructing
- Managing
- Communications & Interacting
- Documenting & Evaluating

b) Reading and writing process

c) Special child

	HOURS
Prof. Prep. Team	10
Lib. Arts & Major	24
TOTAL	34

ADMISSION TO TEACHER EDUCATION

YEAR 3

Professional Preparation Team

- Education Semester
- Special Methods Courses
- On Site Activities
- Use of Technology

- Great Ideas/Issues Seminar

	HOURS
Prof. Prep. Team	18
Lib. Arts & Major	18
TOTAL	36

SCREENING FOR STUDENT TEACHING

YEAR 4

Professional Preparation Team

- Student Teaching, full semester
- Professional Seminar
- Senior Paper/Project

	HOURS
Prof. Prep. Team	15
Lib. Arts & Major	18
TOTAL	33

ENTRANCE TO PROFESSION INTERVIEW

TOTAL HOURS FOR GRADUATION 136

The challenge for the academic year of 1982-83 is for the University faculty to initiate the process of staff development and curriculum design to implement the program for improving teacher education preparation on the Orono campus.